## IN THE CLAIMS

Please replace the presently pending claims with the following amended claims:

- 1. (Currently Amended) Cellular radiotelephony signal of the type including comprising:
- [[-]] a two-directional symmetric principal channel including a principal uplink channel and a principal downlink channel, particularly for low or medium speed transmission of signalling and control data and information; and
- [[-]] at least one supplementary channel assigned to the <u>a</u> downlink only, particularly for transmission of data at high speed, making use of a multicarrier technique for distribution of data in the time / frequency space, and with a sub-frame type structure, <u>eharacterised in that wherein</u> the beginning of at least one sub-frame of the supplementary channel is offset by a time interval with a determined duration not equal to zero ( $\Delta t$ ) with respect to [[a]] <u>at least one</u> determined time (t<sub>0</sub>) on the principal channel, so as to enable <u>synchronisation</u> <u>synchronization</u> of the supplementary channel at sub-frame level in a terminal, by detection of said determined time (t<sub>0</sub>) and by adding said time interval ( $\Delta t$ ).
- 2. (Currently Amended) Cellular radiotelephony signal according to claim 1, the structure of the principal channel being organized organized in frames, characterised in that wherein the determined time (t<sub>0</sub>) on the principal channel is a beginning of a frame of the principal channel.
- 3. (Currently Amended) Cellular radiotelephony signal according to claim 2, characterised in that wherein the beginning of each frame of the principal channel forms a respective one of the determined times (t<sub>0</sub>).
- 4. (Currently Amended) Cellular radiotelephony signal according to claim 2, characterised in that wherein the beginning of only some frame(s) of the principal channel called the synchronization frames forms a respective one of the determined times (t<sub>0</sub>).
- 5. (Currently Amended) Cellular radiotelephony signal according to claim 4, characterised in that wherein the principal channel and / or the supplementary channel transmit(s) identification

information of at least one synchronisation synchronization frame.

- 6. (Currently Amended) Cellular radiotelephony signal according to claim 1, the principal channel having a structure organised organized in frames each including a plurality of slots, characterised in that wherein the determined time (t<sub>0</sub>) on the principal channel is a beginning of a slot of the principal channel.
- 7. (Currently Amended) Cellular radiotelephony signal according to claim 6, characterised in that wherein the beginning of only some slot(s) of the principal channel called the synchronisation synchronization slots, forms a respective one of the determined times (t<sub>0</sub>).
- 8. (Currently Amended) Cellular radiotelephony signal according to claim 7, characterised in that wherein the principal channel and/or the supplementary channel transmit(s) identification information of at least one synchronisation synchronization slot.
- 9. (Currently Amended) Cellular radiotelephony signal according to any one of claims 1 to 8claim 1, the principal channel having a structure organised organized in frames each comprising a plurality of slots, each slot comprising a plurality of signal units (chips), characterised in that wherein the determined duration of said time interval ( $\Delta t$ ) is equal to k times the duration of a signal unit, where k is an integer number.
- 10. (Currently Amended) Cellular radiotelephony signal according to claim 9, characterised in that wherein k is equal to 256.
- 11. (Currently Amended) Cellular radiotelephony signal according to any one of claims 1 to 10claim 1, characterised in that wherein the principal channel and/or the supplementary channel transmit(s) information about said duration of the time interval ( $\Delta t$ ).
- 12. (Currently Amended) Cellular radiotelephony signal according to any one of claims 1 to 11, characterised in that claim 1, wherein the principal channel and/or the supplementary channel transmit(s) information about the a rank within a frame of the structure of the supplementary

channel, a sub-frame for which the beginning may be detected, so as to enable synchronisation synchronization of the supplementary channel at frame level by detecting the beginning of the next frame as a function of said synchronisation synchronization at sub-frame level and said information about the rank of said sub-frame.

- 13. (Currently Amended) Cellular radiotelephony signal according to claim 12, characterised in that wherein the principal channel and/or the supplementary channel also transmit(s) information about the <u>a</u> mode of transmitting sub-frames on the supplementary channel, said synchronisation synchronization at frame level of the supplementary channel also depending on said information about the transmission mode.
- 14. (Currently Amended) Cellular radiotelephony signal according to any one of claim 1 to 13, characterised in that claim 1, wherein the principal channel uses a spectrum spreading access (CDMA) technique and is preferably a UMTS link.
- 15. (Currently Amended) Cellular radiotelephony signal according to any one of claim 1 to 14, characterised in that claim 1, wherein said supplementary channel uses a multicarrier technique based on an OFDM modulation or an IOTA modulation.
- 16. (Currently Amended) Cellular radiotelephony signal according to any one of claims 1 to 15, characterised in that claim 1, wherein the principal channel firstly transmits a notification prompting said terminal to perform said synchronisation synchronization of the supplementary channel at sub-frame level, to swap the terminal from the principal channel to the supplementary channel.
- 17. (Currently Amended) Cellular radiotelephony signal according to claim 16, characterised in that wherein said notification comprises information about said duration of the time interval (Δt) and / or said determined time (t<sub>0</sub>) on the principal channel.
- 18. (Currently Amended) Cellular radiotelephony signal according to either of claims 16 and 17, eharacterised in that claim 16, wherein said notification is transmitted to a paging channel

included in said principal channel.

- 19. (Currently Amended) Synchronisation Synchronization process for a supplementary channel associated with a symmetric two-directional principal channel, said symmetric two-directional principal channel comprising a principal uplink channel and a principal downlink channel, particularly for low or medium speed transmission of signalling and control data and information [[;]], said supplementary channel being assigned to the downlink only, particularly for transmission of data at high speed, making use of a multicarrier technique for distribution of data in the time/frequency space, and with a sub-frame type structure, characterised in that it wherein the process comprises a step for synchronisation of synchronizing the supplementary channel at sub-frame level, itself including wherein synchronizing includes the following steps:
  - [[-]] a) detecting a determined time (t<sub>0</sub>) on the principal channel; and
- [[-]] b) obtaining the beginning of a sub-frame of the supplementary channel, by offsetting the detected determined time (t<sub>0</sub>) detected in a) by a time interval with a determined duration not equal to zero ( $\Delta t$ ).
- 20. (Currently Amended) Process according to claim 19, characterised in that wherein said duration of the time interval ( $\Delta t$ ) and / or said determined time ( $t_0$ ) on the principal channel is (are) fixed and known to said a terminal at which said synchronization process is performed.
- 21. (Currently Amended) Process according to claim 19, characterised in that wherein said duration of the time interval ( $\Delta t$ ) and / or said determined time ( $t_0$ ) on the principal channel is (are) variable, and the principal channel and/or the supplementary channel transmit(s) information about said duration of the time interval ( $\Delta t$ ) and / or said time ( $t_0$ ).
- 22. (Currently Amended) Process according to any one of claims 19 to 21, characterised in that claim 19, wherein it includes a preliminary step in which a notification is transmitted through the principal channel prompting said a terminal to do perform said synchronisation step of synchronizing at sub-frame level of the supplementary channel, so as to swap the terminal from the principal channel to the supplementary channel.

23. (Currently Amended) Terminal of a cellular radiotelephony system, including said terminal comprising:

means of a transmitter for transmitting a principal uplink channel,

- means of a receiver for receiving a principal downlink channel, said principal uplink and said principal downlink forming a symmetric two-directional principal channel particularly for low or medium speed transmission of signalling and control data and information, and
- means of a receiver for receiving at least one supplementary channel, said principal uplink and said principal downlink forming a symmetric two-directional principal channel particularly for low or medium speed transmission of signalling and control data and information, said supplementary channel being assigned to the downlink only, particularly for transmission of data at high speed, making use of a multicarrier technique for distribution of data in the time / frequency space, and with a sub-frame type structure, and
- a synchronizer, which synchronizes characterised in that it comprises means of synchronisation of the supplementary channel at sub-frame level, themselves including: means of detecting wherein the synchronizer detects a determined time (t<sub>0</sub>) on the principal channel: means of obtaining and obtains the beginning of a sub-frame of the supplementary channel, by offsetting the detected time (t<sub>0</sub>) by a time interval with a determined duration not equal to zero (Δt).
- 24. (Currently Amended) Base station of a cellular radiotelephony system, including: means of receiving a receiver, which receives a principal uplink channel,
  - means of transmitting a transmitter, which transmits a principal downlink channel, and said principal uplink channel and said principal downlink channel forming a symmetric two-directional principal channel particularly for low or medium speed transmission of signalling and control data and information,
  - means of transmitting a transmitter, which transmits at least one supplementary channel, said principal uplink channel and said principal downlink channel forming a symmetric two-directional principal channel particularly for low or medium speed transmission of signalling and control data and information, said supplementary

channel being assigned to the <u>a</u> downlink only, particularly for transmission of data at high speed, making use of a multicarrier technique for distribution of data in the time / frequency space, and with a sub-frame type structure,

characterised in that it comprises means of offsetting the beginning of at least one subframe of the supplementary channel, by a time interval with a determined duration not equal to zero ( $\Delta t$ ) from a determined time ( $t_0$ ) on the principal channel, so as to enable synchronisation synchronization of the supplementary channel at subframe level, in a terminal, by detection of said determined time ( $t_0$ ), and adding said time interval ( $\Delta t$ ).